

**Compensatory Afforestation Scheme in Degraded forest land 392.0 Ha. in Kinnerasani WLM Division in lieu of diversion of 649.3014 Ha of Forest land for Venkatesh Khani Coal Mine from underground rights to Surface rights in Ramavaram RF of Kothagudem Division in favour of M/s Singareni Collieries Company Limited, Kothagudem.**

**I. Introduction:**

The Prl. Chief Conservator of Forests, T.S., Hyderabad in the reference No. 10066/2019/FCA-1/PS, dt: 11.10.2019 while enclosing the proposals received from the M/s. Singareni Collieries Company Limited for Diversion of 649.3014 Ha (Reduced from 713.274 Ha. to 649.3014 Ha) forest land in Ramavaram R.F of Ramavaram Range of Kothagudem Division in favour of S.C.Co.Ltd., Kothagudem has issued instructions to process the proposals as per Forest (Conservation) Act 1980. Further, the Prl. Chief Conservator of Forests, T.S., Hyderabad has instructed to prepare CA Scheme in double degraded forest area (less than 0.4 density) with 7-10 years maintenance. The User Agency has also requested the Forest Department to identify degraded forest land double the extent of forest land diverted towards CA. Accordingly the Forest Range Officers of this Division have identified degraded forest land with less than 0.4 density under their jurisdiction over an extent of 392.0 Ha. for raising Compensatory Afforestation. The details of CA in degraded forest land in Kinnerasani WLM Division are as here under.

**II. Identification of degraded forest area for CA:**

The Forest Range Officers, Chatakonda, Allapally, Yanambail and Regalla to whom the matter was referred for identification of degraded forest area in lieu of diversion of forest land over an extent of 649.3014 Ha for the above mentioned project, has identified degraded forest land of 392.0 Ha under their jurisdiction in Kinnerasani WLM Division. The surveyed sketch of the degraded forest area and location on Toposheet 1:50000 scale are enclosed to the scheme proposals. The area details are shown below.

Sl. No	Division	Range	Section	Beat	RF	Comp. No.	Area in Ha
1	Kinnerasani WLM Division	Chatakonda	Bangaruchelka	Bangaruchelka	Bangaruchelka	8	40
2		Chatakonda	Bangaruchelka	Sandralagudem	Bangaruchelka	5	20
3		Chatakonda	Sampathnagar	Tokabandala	Punukuduchelka	4	15
4		Chatakonda	Gattumalla	Gattumalla (S)	Chatakonda	11 (A)	20
5		Chatakonda	Gattumalla	Mylaram	Chatakonda	13	15
6		Chatakonda	Sampathnagar	Siddaram	Chatakonda	24	20
7		Allapally	Chintakunta	Chintakunta (W)	Allapally	16	50
8		Allapally	Allapally	Ramanujagudem	Allapally	6	50
9		Allapally	Venkatapuram	Venkatapuram (S)	Allapally	22	30
10		Regalla	Markode	Kichanapally (N)	Markode	57	30
11		Yanambail	Regulagudem	Regulagudem	Ulvanoor	10	21
12		Yanambail	Mandrikalapadu	M.Venkatapuram	Mamillavai	7	20
13		Yanambail	Mandrikalapadu	M.Venkatapuram	Mamillavai	7	30
14		Yanambail	Yanambail	Mondikatta	Mandrikalapadu	6	11
15		Yanambail	Yanambail	Mondikatta	Mandrikalapadu	8	20
TOTAL							392

### **III. Planting Techniques**

It is proposed to raise miscellaneous Plantation by adopting artificial regeneration under Semi-Mechanical Method in the said degraded forest areas with 3.0 m x 3.0 m espacement. The said areas with red loam soil and sandy soil which are suitable for planting for raising miscellaneous plantation as per the guidelines issued by Prl. Chief Conservator of Forests in Rc.No.43246/2012/CAMPA, dt.29.11.2012. It is felt that the afforestation will prevent the attempt of encroachments in the degraded forest lands besides covering the forest land with good tree growth.

### **IV. Activities proposed in Artificial Regeneration under Semi-Mechanical Method in Degraded forest of 392.00 Ha**

#### **1. Raising of misc. nursery:**

The seedlings suitable with two years old are to be raised in the forest nurseries for planting during 2023-24.

#### **2. Taking up advance operations:**

The advance works under Semi-Mechanical Method include clearance of misc. growth, uprootal of dead old and fresh stumps, tilling, heaping and burning.

#### **3. Raising of plantations:**

The espacement proposed is 3.0 m x 3.0 m @ 1111 plants/ Ha. The activities including deep ploughing, alignment, scooping and Planting in 45 Cms. Cube pits, with misc. species under the direct supervision of the Forest Range Officers concerned. One circular weeding with formation of saucer, Circular weeding cum deep soil working, one critical watering, application of fertilizers, inter-ploughing, protection watcher, digging of cattle proof trench around the sites with top width 1.5 M, bottom width 1.0 M and depth 1.0 M @ 125 Cum. per Ha.

##### **a. Maintenance of plantations:**

Maintenance of plantations are proposed for 10 years as per calendar of operations.

#### **4. Planting targets proposed:**

The operations such as raising nursery, advance operations, raising of plantations and subsequent maintenance proposed to be commenced from 2021-22 as follows:

2021-22: Raising of seedlings in nurseries in 4" x 7" ploy bags

2022-23: Advance Operations & maintenance of nurseries

2023-24: Raising of Plantation

2024-25 to 2034-35: Maintenance of Plantations

### **V. Project period**

It is proposed to implement the scheme from 2021-22 to 2034-35 for a period of (14) years.



## **VI. Project Implementation Agency**

The Forest Divisional Officer, Kinnerasani WLM Division will be the Project Implementation Agency and work will be taken up through the Forest Range Officers, Chatakonda, Allapally, Yanambail and Regalla. The raising of Compensatory Afforestation Plantation requires additional manpower and mobility. Hence, it is proposed to hire services of one Data Entry Operator for initial three (3) years in Division office. Accordingly, necessary provisions are made in the scheme proposals under Administrative Cost i.e, 10% of the scheme value.

## **VII. Cost structure**

Basic rates proposed as per FSR 2020-21 and 10% price escalation is proposed every year on the basic rate of FSR 2020-21. All required seedlings will be raised at four (4) existing nursery centers and accordingly required nursery infrastructure is proposed in the scheme. The details of year-wise physical and financial targets are enclosed in Annexure No. I. Unit cost of different planting techniques and plantation operations are shown in separate sheets and are enclosed.

## **VIII. Cost of the (Scheme) Project**

Total cost of the project is Rs. **2349.741** lakhs as shown below. The details in Annexure - 1 are also enclosed to the scheme proposals.

S.No.	Scheme Proposals	Cost in Lakhs
1	Raising and Maintenance of Nurseries	331.880
2	Advance operations	246.030
3	Raising of plantations	461.264
4	1 <sup>st</sup> year maintenance of Plantations	186.687
5	2 <sup>nd</sup> year maintenance of Plantations	148.076
6	3 <sup>rd</sup> year maintenance of Plantations	94.435
7	4 <sup>th</sup> year maintenance of Plantations	103.878
8	5 <sup>th</sup> year maintenance of Plantations	76.584
9	6 <sup>th</sup> year maintenance of Plantations	15.954
10	7 <sup>th</sup> year maintenance of Plantations	92.666
11	8 <sup>th</sup> year maintenance of Plantations	19.304
12	9 <sup>th</sup> year maintenance of Plantations	112.126
13	10 <sup>th</sup> year maintenance of Plantations	23.358
14	SMC Works	135.774
15	Habitat Improvement works	32.249
16	Provision of Monitoring facility for effecting implementation of afforestation	63.000
17	Administrative Cost	206.476
	<b>Total Cost of the Project:</b>	<b>2349.741</b>

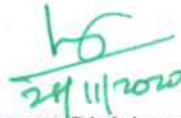
## IX. Employment Generation

The degraded forest land proposed for Compensatory Afforestation is located in Palvancha, Allapally and Laxmidevipally Mandals in Agency area. The local labour mostly Tribals along with Scheduled Castes will be benefitted by implementation of this project by way of wage employment generation expected to be created is 1,74,634 man days during the project period from 2021-22 to 2034-35 (60% work component has been taken as wage component and mandays are estimated based on the District Collector's wage rates for 2019-20 @ Rs. 657/- per day).

## X. Annexures:

Annexure I	Year wise estimated cost for Compensatory Afforestation
Annexure II	Data sheets for unit cost

Further, it is mentioned that in case the selected locations and the areas are unavailable for taking up planting anticipating the delay of approval of the proposal, suitable degraded areas will be selected and planting will be taken up and accordingly the deviation, if any, in implementing the scheme will be borne by the User Agency in the jurisdiction of Kinnerasani WLM Division. Similarly, it is also mentioned that the User Agency will be remitting the equal amount into CAMPA Account, in case the degraded forest lands are taken up for re-afforestation with any funding agency since Kinnerasani WLM Forest Division has been taking up re-afforestation in the retrieved areas of forest lands, where encroachment problem is severe. To curb the encroachment problem and re-afforestation of the gap areas this modification is proposed.

  
Forest Divisional Officer,  
Kinnerasani WLM Division,  
Palvancha.



## Compensatory afforestation scheme for 392 ha over

Sl. No	Item of Work	Phy	Unit Cost 20-21 (Rs.)	2028 - 29			2029 - 30			2030 - 31			2031 - 32			2032 - 33			2033 - 34			2034 - 35			Grand Total	
				Phy	Unit Cost (Rs.)	Fin (Rs.in Lakhs)	Phy	Unit Cost (Rs.)	Fin (Rs.in Lakhs)	Phy	Unit Cost (Rs.)	Fin (Rs.in Lakhs)	Phy	Unit Cost (Rs.)	Fin (Rs.in Lakhs)	Phy	Unit Cost (Rs.)	Fin (Rs.in Lakhs)	Phy	Unit Cost (Rs.)	Fin (Rs.in Lakhs)	Phy	Unit Cost (Rs.)	Fin (Rs.in Lakhs)	Phy	Fin (Rs.in Lakhs)
1	2	3	4	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48
I	<b>Raising of Plants in Nurseries &amp; their Maintenance, Procurement of</b>																									
1	Raising of Primary beds	Plant	0.4116																						800000	3.66712
2	Raising of Bag Plants of 4"x7"	Plant	2.9644																						800000	26.41322
3	Maintenance of Bag Plants of 4"x7"	Plant	1.1150																						800000	10.92853
4	Conversion of bag plants from 4"x7" to 9"x11"	Plant	17.3833																						800000	170.37347
5	Maintenance of Bag Plants of 9"x11"	Plant	9.7391																						800000	104.99862
	Sub Total:																									316.38095
II	<b>Upgrade the infrastructure of nurseries for rainy (2) years old tall p</b>																									
6	Construction of over head water tank could raise of conversion of seedlings in (1) location keeping in view of the labour circular with pipe lines	Nos																							1	8.000
7	Storage sheds for polybags, seeds, equipments etc.,	Nos																							1	6.000
8	Design platform for seed design	Nos																							1	1.500
	Sub Total:					0.000			0.000			0.000			0.000			0.000			0.000			0.000		15.500
II	<b>Planting activities (SMM) in DFL</b>																									
6	Advance Operations	Ha	51870																						392.00	246.02978
7	Raising of Plantation	Ha	88407																						392.00	461.26363
8	1st Year Maintenance	Ha	32528																						392.00	186.68652
9	2nd Year Maintenance	Ha	23455																						392.00	148.07552
10	3rd Year Maintenance	Ha	13598																						392.00	94.43473
11	4th Year Maintenance	Ha	13598	0.00	29149	0.000																			392.00	103.87820
12	5th Year Maintenance	Ha	9114	392.00	19537	76.584	0.00	21490	0.000																392.00	76.58374
13	6th Year Maintenance	Ha	1726				392.00	4070	15.954	0.00	4477	0.000													392.00	15.95369
14	7th Year Maintenance	Ha	9114							392.00	23639	92.666	0.00	26003	0.000										392.00	92.66633
15	8th Year Maintenance	Ha	1726										392.00	4924	19.304	0.00	5417	0.000							392.00	19.30396
16	9th Year Maintenance	Ha	9114													392.00	28604	112.126	0.00	31464	0.000				392.00	112.12625
17	10th Year Maintenance	Ha	1726																392.00	5959	23.358	0.00	6554	0.000	392.00	23.35779
	Sub Total:					76.584			15.954			92.666			19.304			112.126			23.358			0.000		1580.36015
III	<b>SMC Works</b>																									
18	Construction of Percolation Tanks in CA-DFL and within vicinity of CA-DFL	No's	220000																						4	10.64800
19	Construction of Mini PTs in CA-DFL within vicinity of CA-DFL	No's	87500																						6	6.38880
20	Construction of RFDs	Cum	1000																						1200	14.52000
21	Staggered trenches in DFL CA within vicinity of CA-DFL	Cmt	231																						8000	23.75835
25	Construction of RFDs	Cum	1000																						1200	14.520
21	Digging of CPT in km around DFL plantation	km	154000																						30.00	53.36100
22	Bund plantation in km	km	33000																						30.00	12.57795
	Sub Total:					0.000			0.000			0.000			0.000			0.000			0.000			0.000		135.774
IV	<b>Habitat Improvement works</b>																									
22	Removal of obnoxious weed in the RF within the vicinity of CA-DFL	ha	8756																						200.00	22.24900
23	Digging of bore wells, fixing solar operated pump sets and construction of MPTs	No's	500000																						2.00	10.00000
	Sub Total:					0.000			0.000			0.000			0.000			0.000			0.000			0.000		32.24900
II	<b>Provision of Monitoring facility for effecting implementation of aff</b>																									

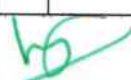
Sl. No	Item of Work	Phy	Unit Cost 20-21 (Rs.)	2028-29			2029-30			2030-31			2031-32			2032-33			2033-34			2034-35			Grand Total	
				Phy	Unit Cost (Rs.)	Fin (Rs.in Lakhs)	Phy	Unit Cost (Rs.)	Fin (Rs.in Lakhs)	Phy	Unit Cost (Rs.)	Fin (Rs.in Lakhs)	Phy	Unit Cost (Rs.)	Fin (Rs.in Lakhs)	Phy	Unit Cost (Rs.)	Fin (Rs.in Lakhs)	Phy	Unit Cost (Rs.)	Fin (Rs.in Lakhs)	Phy	Unit Cost (Rs.)	Fin (Rs.in Lakhs)	Phy	Fin (Rs.in Lakhs)
1	2	3	4	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48
27	Construction of biodiversity monitoring centre	Nos																							1	20.000
28	Improve the camping facility for wild life experts in wild life division with solar power	Nos																							2	20.000
29	Purchase of office equipments of for monitoring project for senior officers, FRO's & office staff	Ls																							LS	5.000
30	Improvement of mobility by Purchasing of vehicle for monitoring	Nos																							1	18.000
	Sub Total																									63.000
IV	Administrative Cost - 10%					7.658			1.595			9.267			1.930			11.213			2.336			0.000		206.47642
	Total year wise outlay of the project					84.242			17.549			101.933			21.234			123.339			25.694			0.000		2349.741

  
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 Kinnerasani WLM Division,  
 Palvancha.

## UNIT COST FOR MAINTENANCE OF BAG PLANTS (September to till disposal)

Sl. No.	FSR-2019-20 Code	Item of work	Unit	Quantity	As per FSR				Amount (Rs.)
					Rate (Rs.)	Per	Agency allowance 25% (Rs)	Total (Rs.)	
		<b>MAINTENANCE OF BAG NURSERY FROM SEPTEMBER TO TILL DISPOSAL</b>							
1	01.05.01	Watering plants for 10 m X 1 m size secondary bed	Bed/month	4	177.14	1	44.28	221.42	885.68
2	01.05.02	Shifting, grading and rearrangement in beds	Bed/weeding	1	245.96	1	61.49	307.45	307.45
3	01.05.04	<b>Cost of Protection:</b> One Nursery Watcher is allowed up to 1 lakh RT nursery or 100 secondary beds of polybags / 100 Teak beds of 10 x 1 m size or combination of both. One additional Nursery Watcher is permitted for nurseries having more than 1 lakh upto 3 lakh RT seedlings or more than 100 upto 300 secondary beds or Teak beds of 10 x 1 m size or combination of both. For more than 3 lakh RT or 300 secondary beds of Teak beds or combination of both another additional Nursery Watcher is allowed. While calculating the number of Nursery Watcher, care shall be taken to include the nursery raising under all Schemes at a particular site. No extra Nursery Watcher is allowed for primary beds of 1x1 m size. However, the above narrative is subject to the provisions cited under general instructions.	Watcher/month	5	9194.85	100	0.00	9194.85	459.74
		<b>Total</b>							<b>1652.87</b>
		<b>cost of each plant (1100 Plants per bed)</b>							<b>3.3057</b>

10% escalation every year

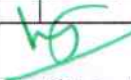
  
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## UNIT COST FOR MAINTENANCE OF BAG PLANTS (April to August)

Sl. No.	FSR-2019-20 Code	Item of work	Unit	Quantity	As per FSR				Amount (Rs.)
					Rate (Rs.)	Per	Agency allowance 25% (Rs)	Total (Rs.)	
	01.04.00	MAINTAINANCE OF BAG PLANTS NURSERY UPTO PLANTING SEASON (APRIL TO AUGUST) for 10 m X 1 m size secondary beds (2600 Nos of 4" X 7" bags; 1700 Nos of 5" X 9" bags ; 1100 Nos. of 6"X12" bags; 800 Nos. of 8"X12" bags; 400 Nos. of 10"x16" bags per bed)							
	01.04.01	Watering polybag secondary beds twice a day for 4 months							
1	a	Manually with rose spray or finely perforated nozzle attached to a hose pipe	Bed/month	4	286.76	1	71.69	358.44	1433.78
2	01.04.02	Weeding once during maintenance year	Bed/weeding	1	52.66	1	13.16	65.82	65.82
3	01.04.03	Shifting, grading and rearrangement in beds	Bed/shifting	2	245.96	1	61.49	307.45	614.91
4	01.04.05	Cost of foliar nutritient formulations like multiplex or NPK-19:19:19; fungicides and insecticides from April to August	As per actuals	1	20.00	1	0.00	20.00	20.00
	01.04.06	Cowdung Slurry application (One can apply chemical foliar spray or apply cowdung slurry - not both)							
5	a	Cost and transportation of fresh cowdung	As per actuals	1	25.00	1	0.00	25.00	25.00
6	01.04.07	Weeding in the space between the beds, inspection path and surroundings of Nursery	Bed	1	28.98	1	7.25	36.23	36.23
7	01.05.04	<b>Cost of Protection:</b> One Nursery Watcher is allowed up to 1 lakh RT nursery or 100 secondary beds of polybags / 100 Teak beds of 10 x 1 m size or combination of both. One additional Nursery Watcher is permitted for nurseries having more than 1 lakh upto 3 lakh RT seedlings or more than 100 upto 300 secondray beds or Teak beds of 10 x 1 m size or combination of both. For more than 3 lakh RT or 300 secodary beds of Teak bedsor combination of both another additional Nursery Watcher is allowed. While calculating the number of Nursery Watcher, care shall be taken to include the nursery raising under all Schemes at a particular site. No extra Nursery Watcher is allowed for priniary beds of 1x1 m size. However, the above narrative is subject to the provisions cited under general instructions.	Watcher/ month	4	9194.85	100	0.00	9194.85	367.79
8	01.04.09	Electricity charges			500.00		0.00	500.00	500.00
		<b>Total</b>							<b>3063.52</b>
9	01.04.08	Contingencies @ 5%							<b>153.18</b>
		<b>2020-21 Total</b>							<b>3216.70</b>
		<b>cost of each plant (1100 Plants per bed)</b>							<b>6.4334</b>

10% escalation every year

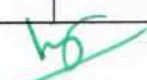
  
 Forest Divisional Officer  
 Kinnerasnai WLM Division,  
 Palvancha.



**UNIT COST FOR CONVERSION FROM 4"x7" to 9" x 11"**

Sl. No.	FSR-2019-20 Code	Item of work	Unit	Quantity	As per FSR				Amount (Rs.)
					Rate (Rs)	Per	Agency allowance 25% (Rs)	Total (Rs)	
		CONVERSION of Root Trainer plants or 4"x7" or 5"x9" bag-plants into higher size bags - to be done during September - October. At the time of conversion, the height of the plants should be at least above 0.45m in height (excluding the height of polybag).							
		Cost and Transport of ingredients for Potting Mixture: Red Soil, tank-silt / clayey soil, FYM in 2:1:1 ratio. To this soil mixture, 220 gm of Indophyll M-45, 4.5 kg of single super phosphate (SSP) and 250 gm of phorate granules per 1 cum of potting mixture will be added. Cost of chemicals is as per actuals.							
	01.03.21	Transportation of soil mixture ingredients							
		Distance up to 5 km							
1	c	4" x 7" to 9" x 11" polybags (4.717 - 0.56 = 4.157 cum)	No	500	1537.40	1000	0.00	1537.40	768.70
	01.03.22	Transportation of soil mixture ingredients more than 5 km distance and upto 25 km distance							
2	c	4" x 7" to 9" x 11" polybags (4.717 - 0.56 = 4.157 cum)	No	500	38.13	1000	0.00	38.13	19.07
	01.03.24	Preparation of Potting Mixture by powdering of various ingredients, sieving and mixing them in prescribed proportion; opening of bags and filling with potting mixture partially, tearing the polybag plants and repotting them inside bigger bags and filling the rest of bags; gently pressing the same with finger tips and arranging in beds of 10x1 m size (6"x12" size: 1100 bag plants / bed and 8"x12" size": 800 bag plants per bed)							
3	c	4" x 7" to 9" x 11" polybags (4.717 - 0.56 = 4.157 cum)	No	500	2740.95	1000	685.24	3426.19	1713.09
	01.03.30	Weeding the plants (1100 no. of 6"x12"bags; 800 no. of 8"x12" bags; and 400 no. of 10"x16" bags) from November - March: 2 weedings							
4		Weeding the plants (2 weedings)	Bed	2	52.66	1	13.16	65.82	131.64
5	01.03.31	Shifting, Grading and rearranging in secondary beds - One Grading in February	Bed	2	245.96	1	61.49	307.45	614.91
	01.03.32	Watering the plants manually twice a day (from Novemebr - March) with rose spray or finely perforated nozzle attached to a hose pipe.							
6	a	Manually with rose spray or finely perforated nozzle attached to a hose pipe	Bed	5	286.81	1	71.70	358.51	1792.55
	01.03.34	Cost of foliar nutrient formulations like multiplex or NPK-19:19:19; fungicides and insecticides from July to Oct.							30.00
7	01.05.04	Cost of Protection: One Nursery Watcher is allowed up to 1 lakh RT nursery or 100 secondary beds of polybags / 100 Teak beds of 10 x 1 m size or combination of both. One additional Nursery Watcher is permitted for nurseries having more than 1 lakh upto 3 lakh RT seedlings or more than 100 upto 300 secondray beds or Teak beds of 10 x 1 m size or combination of both. For more than 3 lakh RT or 300 secodary beds of Teak bedsor combination of both another additional Nursery Watcher is allowed. While calculating the number of Nursery Watcher, care shall be taken to include the nursery raising under all Schemes at a particular site. No extra Nursery Watcher is allowed for primary beds of 1x1 m size. However, the above narrative is subject to the provisions cited under general instructions.	Bed	4	9194.85	100	0.00	9194.85	367.79
8		Cost of the ploythene bags							2340.00
9	01.03.39	Electricity charges							500.00
		<b>Total</b>							<b>8277.75</b>
10	01.03.38	Contingencies @ 5%							413.887
		<b>2020-21 Total for 1100 plants</b>							<b>8691.64</b>
		<b>cost of each plant</b>							<b>17.3833</b>


10% escalation every year

  
Forest Divisional Officer  
Kinnerasnai WLM Division,  
Palvancha.

**UNIT COST FOR MAINTENANCE OF BAG PLANTS (4"x7")**

Sl. No.	FSR-2019-20 Code	Item of work	Unit	Quantity	As per FSR				Amount (Rs.)
					Rate (Rs)	Per	Agency allowance 25% (Rs)	Total (Rs)	
		Maintenance of 4"x7" or 5"x9" bag-plants from April – August - Watering the plants twice a day from April – August							
1	01.04.01	(a) Manually with rose cans or finely perforated nozzle attached to a hose pipe	Bed	5	286.76	1	71.68875	358.44375	1792.22
2	01.04.02	Weeding the beds during May & July	Bed	2	52.66	1	13.164375	65.821875	131.64
3	01.04.03	Shifting, grading and rearrangement in beds	Bed	1	245.96	1	61.490625	307.453125	307.45
4		Electricity charges							300.00
5	01.05.04	<b>Cost of Protection:</b> One Nursery Watcher is allowed up to 1 lakh RT nursery or 100 secondary beds of polybags / 100 Teak beds of 10 x 1 m size or combination of both. One additional Nursery Watcher is permitted for nurseries having more than 1 lakh upto 3 lakh RT seedlings or more than 100 upto 300 secondary beds or Teak beds of 10 x 1 m size or combination of both. For more than 3 lakh RT or 300 secondary beds of Teak beds or combination of both another additional Nursery Watcher is allowed. While calculating the number of Nursery Watcher, care shall be taken to include the nursery raising under all Schemes at a particular site. No extra Nursery Watcher is allowed for primary beds of 1x1 m size. However, the above narrative is subject to the provisions cited under general instructions.	Bed	4	9194.85	100	0.00	9194.85	367.79
		<b>2020-21 Total</b>							<b>2899.11</b>
		<b>cost of each plant (2600 plants per bed)</b>							<b>1.1150</b>

10% escalation every year

  
 Forest Divisional Officer  
 Kinnerasnai WLM Division,  
 Palvancha.




**UNIT COST FOR BAG PLANT NURSERY**

Sl. No.	FSR-2019-20 Code	Item of work	Unit	Quantity	As per FSR				Amount (Rs.)
					Rate (Rs)	Per	Agency allowance 25% (Rs)	Total (Rs)	
		<b>BAG PLANT NURSERY:</b> Seedlings need to be raised in 4"x7" (200 gauge) or 5"x9" (250 gauge) bags which are to be converted into 6"x12" (400 gauge) or 8"x12" (400 gauge) polybags. The seedlings are to be transplanted from primary beds in June - July. Hence the bags are to be filled during April-May when the soil is dry.							
		<b>Raising of Nursery in Polythene bags</b> in sizes of 4"x7" (200 gauge) or 5"x9" (250 gauge) bags and arranging in secondary beds (Bed size: 10 X 1 M).							
1	01.03.01	Site preparation for New Sites - Clearing of growth, uprootal of stumps and removal of surface stones, rubbish of all sorts etc.	Bed	1	52.08	1	13.02	65.10	65.10
		Cost of Polybags (including the cost of certification by): To ensure quality control, the quality of bags have to be certified by CIPET (Central Institute of Plastic Engineering & Technology), Hyderabad at the cost of tenderer by taking samples from various lots of polybags.							
2	01.03.03	10 cm x 17.5 cm (4" x 7") size bags of 200 g: 589 bags / kg	Kg	4.41	156.00	1	0.00	156.00	687.96
	01.03.04	Cost and Transport of ingredients for Potting Mixture: (As per CSSR) Red Soil, tank silt, FYM in 2:1:1 ratio. To this soil mixture, 220 gm of Indophyll M-45, 4.5 kg of single super phosphate (SSP) and 250 gm of phorate granules per 1 cum of potting mixture will be added. Cost of chemicals is as per actuals.							
	01.03.05	Distance upto 5 km							
3	a	10 cm x 17.5 cm (4" x 7") size bags: 2600 bags / bed	No's	2600	207.06	1000		207.06	538.36
	01.03.06	For every extra km beyond 5 km upto 25 km							
4	a	10 cm x 17.5 cm (4" x 7") = 0.56 cum vol. for 1000 bags	No's	2600	5.15	1000		5.15	13.39
	01.03.08	Preparation of Potting Mixture by powdering of various ingredients, sieving and mixing them in prescribed proportion; opening of bags and filling with potting mixture and gently pressing the same with finger tips and arranging in beds.							
5	a	10 cm x 17.5 cm (4" x 7") size bags: 2600 bags / bed	No's	2600	613.10	1000	153.27	766.37	1992.56
6	01.03.09	Alignment of beds including alignment of inspection paths etc	Bed	1	7.98	1	2.00	9.98	9.98
7	01.03.10	Pricking out seedlings from primary beds and transplanting into polybags	No's	2600	147.74	1000	36.93	184.67	480.14
8	01.03.11	Sowing / dibbling of pretreated seeds (e.g. Yegisa, Nalamadi, Yerumaddi etc.) directly into bags including cost of treatment	No's	2600	87.89	1000	21.97	109.86	285.63
9	01.03.12	<b>Watering the plants (2 Months) twice a day from Feb-March</b> - a) Manually with rose cans or finely perforated nozzle attached to a hose pipe	Bed	4	286.76	1	71.69	358.44	1433.78
10	01.03.13	Weeding to be done for every 2 months from the date of transplantation up to March	Bed	4	52.66	1	13.16	65.82	263.29
11	01.03.14	1st shifting and grading after three months and consecutive shifting and grading after every two months till the nursery stock is lifted	Bed	1	245.96	1	61.49	307.45	307.45
12	01.03.15	Replacement of casualties after sorting out the empty bags and keeping at one end of the bed (maximum 10% of total stock is permissible)	Bed	1	69.83	1	17.46	87.28	87.28
13	01.03.16	Cost of foliar nutrient formulations like multiplex or NPK-19:19:19; fungicides and insecticides from July to Oct.	Bed	1	34.00	1	0.00	34.00	34.00
14	01.03.18	Weeding in the space between the beds, inspection path and surroundings of Nursery	Bed	2	35.91	1	8.98	44.89	89.78



Sl. No.	FSR-2019-20 Code	Item of work	Unit	Quantity	As per FSR				Amount (Rs)
					Rate (Rs)	Per	Agency allowance 25% (Rs)	Total (Rs)	
15	01.05.04	Cost of Protection: One Nursery Watcher is allowed up to 1 lakh RT nursery or 100 secondary beds of polybags / 100 Teak beds of 10 x 1 m size or combination of both. One additional Nursery Watcher is permitted for nurseries having more than 1 lakh upto 3 lakh RT seedlings or more than 100 upto 300 secondary beds or Teak beds of 10 x 1 m size or combination of both. For more than 3 lakh RT or 300 secondary beds of Teak beds or combination of both another additional Nursery Watcher is allowed. While calculating the number of Nursery Watcher, care shall be taken to include the nursery raising under all Schemes at a particular site. No extra Nursery Watcher is allowed for primary beds of 1x1 m size. However, the above narrative is subject to the provisions cited under general instructions.	Bed	4	9194.85	100	0.00	9194.85	367.79
16		Electricity charges					0.00	300.00	300.00
		<b>Total</b>							<b>6956.47</b>
17		Add casualty 10%							751.09
		<b>2020-21 Grand Total</b>							<b>7707.56</b>
		<b>cost of each plant (2600 plants per bed)</b>							<b>2.9644</b>


10% escalation every year

  
Forest Divisional Officer  
Kinnerasani WLM Division,  
Palvancha.

**UNIT COST FOR RAISING OF PRIMARY BEDS**

Sl. No.	FSR-2019-20 Code	Item of work	Unit	FSR Rate (Rs.)	Agency allowance 25% (Rs)	Total Rate (Rs.)	Amount (Rs.)
1	01.00.00	<b>PRIMARY BEDS</b> of 1x1x0.3 m size for Miscellaneous species including bamboo - 50 primary beds for 1 lakh nursery is permitted. Primary beds should start from Jan - May depending on availability of fresh seeds. Once primary beds are formed, they can be used upto 5 years without changing the medium - what is required each time is solarization, burning a layer of grass on it and adding the below recommended fungicides and insecticides to the medium.					
2	01.01.01	Preparation of New Site by clearing jungle growth, uprootal of stumps and removal of surface stones, pebbles etc.	Bed	5.20	1.30	6.50	6.50
3	01.01.03	Digging soil of the demarcated beds of 1x1x0.30 m size	Bed	40.06	10.01	50.07	50.07
4	01.01.04	Cost of sandy soil and transportation with 5 kms lead including loading and unloading charges (sandy soil and FYM in 5:1 ratio, i.e., 0.125 cum sandy soil and 0.025 cum FYM per primary bed	Bed	30.29	7.57	37.87	37.87
5	01.01.05	For every extra km beyond 5 km upto 25 km	Bed	23.00	5.75	28.75	28.75
6	01.01.06	Cost and transport of 0.025 cum FYM	Bed	26.04	0.00	26.04	26.04
7	01.01.07	Mixing of sandy soil and FYM in 5:1 proportion (50 % of volume of bed) with excavated soil and refilling the bed and levelling.	Bed	11.39	2.85	14.24	14.24
8	01.01.08	Covering the beds with dried grass and leaf litter and burning them to ash which can form the upper layer	Bed	13.02	3.26	16.28	16.28
10	01.01.10	Cost of seed - seed weight, germination percentage and target of planting stock of individual species are to be taken into consideration while estimating the requirement of seeds	Bed	500.00	0.00	500.00	500.00
11	01.01.12	Sowing of seed (finer seeds like Adina, Mitragyna, Anthocephalus etc. to be mixed with sand and broadcasted - Bigger seeds to be dibbled in lines 1-2 cm apart) and covering the bed to a thickness of 2.5 cm with paddy hay including cost and conveyance	Bed	12.97	3.24	16.21	16.21
12	01.01.13	Watering the primary nursery beds with rose water cans twice daily for a maximum period of 2 months.	45 Days	14.60	3.65	18.24	27.37
13	01.01.15	Cost of chemicals, fungicide and insecticide	Bed	5.00	0.00	5.00	5.00
14		Electrical Charges		20.00	0.00	20.00	20.00
		<b>Total</b>					<b>748.32</b>
		<b>Rasing of seedlings 110% for obtaining 100%</b>				10%	<b>74.83</b>
		<b>Total</b>					<b>823.15</b>
		<b>cost of each plant (2000 plants per bed) - 2020-21</b>					<b>0.4116</b>

10% escalation every year

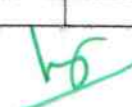
  
 Forest Divisional Officer  
 Kinnerasnai WLM Division,  
 Palvancha.



**Unit Cost for Advance Operations for Raising of N.T.S.H. Plantations 3m X 3m (SMM) during 2020-21**

FSR Code	Item of work	Unit	Quant ity	Unit Rate per Ha				Amount (Rs.)
				As per FSR				
				Rate (Rs.)	Agency allowence 25% (Rs)	Total (Rs.)	Per	
02.08.01	Survey with hand-held GPS (staff to carry out) and demarcation - one manday is allowed for assistance. The surveyed sketch with exact effective area statement will be uploaded in MIS platform by end of December.	Plantat ion	1	374.48	0.00	374.48	1	374
02.08.02	Clearing unsalable unwanted jungle growth (leaving all the tree species of good form particularly the hardwood tree species like Teak, Nallamaddi, Yegisa, Narepa, Somi, Jitregi, Billudu, Chenangi etc. and NTFP species like Ippa, Morri, Tani, Karaka, Vepa, Maredu, Tapasi, Tuniki, Chinta, Usuri, Nallajeedi etc.); Spreading the cut material all over the site; and Burning the same twice till completely burnt. The unsuitable area shall be excuded from the clearing opeartion and the expenditure shall be incurred for effective area only. All the above operations shall be completed before December.							
a	Sparse Jungle growth (< 10% ground area covered with Jungle growth)	Ha	0	2081.36	520.34	2601.70	1	0
b	Very Light Jungle growth (>10% and up to 20% ground area covered with Jungle growth)	Ha	1	3128.53	782.13	3910.66	1	3911
c	Light Jungle Growth (> 20% and upto 30% ground area covered with Jungle growth) with prior written approval of DFO based on the field inspection of DFO.	Ha	0	7350.00	1837.50	9187.50	1	0
02.08.03	Uprootal of Stumps (excluding unsuitable patches) to a minimum depth of 45 cm with heavy machinery fitted with 0.90 cum and above capacity bucket, filling the pits caused by uprootal, and levelling. For retrived encroached area, the approval of Circle Head is required and the approval should indicate clearly the density of stumps or vegetation to be removed through uprootal. The uprootal work can be carried out preferably through tender process.				0.00	0.00		
a	Sparse Jungle growth (< 10% ground area covered with Jungle growth)	Ha	0	5184.30	0.00	5184.30	1	0
b	Very Light Jungle growth (>10% and up to 20% ground area covered with Jungle growth)	Ha	1	10034.10	0.00	10034.10	1	10034
c	Light Jungle Growth (> 20% and upto 30% ground area covered with Jungle growth) with prior written approval of DFO based on the field inspection of DFO.	Ha	0	13044.80	0.00	13044.80	1	0
02.08.04	Collection and Removal of uprooted stumps of all sizes, other debris etc. to outside plantation site							
a	Sparse Jungle growth (< 10% ground area covered with Jungle growth)	Ha	0	5796.11	1449.03	7245.13	1	0
b	Very Light Jungle growth (>10% and up to 20% ground area covered with Jungle growth)	Ha	1	9197.79	2299.45	11497.24	1	11497
c	Light Jungle Growth (> 20% and upto 30% ground area covered with Jungle growth) with prior written approval of DFO based on the field inspection of DFO.	Ha	0	10724.65	2681.16	13405.81	1	0
02.08.05	Tilling (Permissible for CA area only) the soil to a depth of 0.45 cm in the affected area (excluding unsuitable patches) with heavy duty machinery fitted with 0.9 cum and above capacity bucket and levelling - Permissible for CA area only (and written approval of Circle head is needed and required budgetary provision has to find place in annual approved plan) and VIP planting area ( minimum area should be more than 1 ha). The uprootal and tilling works shall be done preferably through a tender process and the execution of work completed before end of March							
a	Very Light Jungle growth (>10% and up to 20% ground area covered with Jungle growth)	ha	1	13962.80	3490.70	17453.50	1	17454
	Digging of cattle proof trench around the plantation site	Cum	200	43.00	0.00	43.00	1	8600
	Unit Rate for 2020 -21							51870

10% escalation every year

  
 Forest Divisional Officer  
 Kinnerasnai WLM Division,  
 Palvancha.




## Unit Cost for Raising of N.T.S.H. Plantations 3m X 3m. (SMM) during 2020-21

Unit Rate per Ha

FSR Code	Item of work	Unit	Quantity	As per FSR				Amount (Rs.)
				Rate (Rs.)	Agency allowance 25% (Rs)	Total (Rs.)	Per	
02.09.03	Deep Ploughing the effective (excluding unsuitable patches) plantation area across the slope to a depth of 30 cm with Heavy-duty Tractor of 55 HP and above with Firm Mould Board (FMB) plough. <b>FOR TILLED AREA ONLY</b>							
a	Ordinary Soil	Ha	1	3056.00	0.00	3056	1	3056
02.09.01	Removing congestion of root suckers and other uprooted material hindering the effective ploughing	Ha	1	1066.07	266.52	1332.58	1	1333
02.09.04	© Alignment and staking including demarcation of base line for Misc species with espacement 3mX3m (1111 Nos)	No's	1111	89.36	22.34	111.69	100	1241
02.09.05	ii) Cost of preparation of stakes (2.0 m length) and transportation to site (subject to condition that the seedling height is 1.5m to 2.0m height)	No's	1111	1200.00	300.00	1500.00	100	16665
02.09.06	Digging of Pits in Ploughed Areas in June - July by adopting 50% of original rate of digging of pits of ordinary soil							
b	45 cm cube size pits	No's	1111	10.66	2.66	13.32	1	14801
	<b>PLANTING OPERATIONS DURING RAISING YEAR</b>							
	Transportation of Bag plants / Root trainer plants from nursery site to plantation site including loading and unloading				0	0.00		
02.09.07	b) upto 5 Km lead (23 X 28 cm (9" X 11") bag plants) (PCCF TS Hyd Rc.No. 2563/2020/WLR-2, dt: 13.07.2020.	No's	1111	243.66	0	243.66	100	2707
02.09.08	b) 5 Km to 25 Km lead (23 X 28 cm (9" X 11") bag plants) (PCCF TS Hyd Rc.No. 2563/2020/WLR-2, dt: 13.07.2020.	No's	1111	171.20	0	171.20	100	1902
02.09.10	Internal transport of bag plants/root trainers to planting points on head loads.				0	0.00		
b	(23 X 28 cm (9" X 11") bag plants) (PCCF TS Hyd Rc.No. 2563/2020/WLR-2, dt: 13.07.2020.	No's	1111	164.84	41.21	206.05	100	2289
02.09.11	Fortification of seedling with insecticide and treating pits with SSP							
	(a) Application of 50 gm of SSP per pit (1 day before planting) for root growth and early establishment of plant after planting. ii) Similarly, the bag plants to be planted will be dipped inside Chloropyriphos solution (5ml Chloropyriphos in 1 lit water) either at nursery site before transport or at plantation site before planting	No's	1111	39.27	9.82	49.09	100	545
	(b) Cost of SSP, Chloridine dust or Chloropyriphos	No's	1111	1.00	0.00	1.00	1	1111
	<b>Planting Bag Plants</b>							
02.09.12	(b) Planting in 45 cm size cubic pit Pit	No's	1111	437.48	109.37	546.85	100	6076
02.09.14	Watering (one time) immediately after planting if the planting takes place on a non-rainy days and during dry spell a) One critical watering after planting if planting takes place on non-rainy days with the prior written permission of DFO / FDO.	No's	1111	264.86	66.22	331.08	100	7357
02.09.15	Replacement of Casualties 20% during Raising & 25% in 1st year (In case of Eucalyptus 10% during raising and no causality replacement for further maintenance). The casualty replacement should be done in 3 stages at an interval of 15 days immediately after planting during raising year.							
								50% of rate of original pitting rate during raising year and 100% during maintenance years. Planting, transportation and internal transportation same as adopted during raising year
02.09.06	Digging of Pits in Ploughed Areas in June - July by adopting 50% of original rate of digging of pits of ordinary soil - a) 45 cm size cubic pits	No's	222	5.33	1.33	6.66	1	1479
	Transportation of Bag plants / Root trainer plants from nursery site to plantation site including loading and unloading							
02.09.07	b) upto 5 Km lead (23 X 28 cm (9" X 11") bag plants) (PCCF TS Hyd Rc.No. 2563/2020/WLR-2, dt: 13.07.2020.	No's	222	243.66	0	243.66	100	541
02.09.08	b) 5 Km to 25 Km lead (23 X 28 cm (9" X 11") bag plants) (PCCF TS Hyd Rc.No. 2563/2020/WLR-2, dt: 13.07.2020.	No's	222	171.20	0	171.20	100	380
02.09.10	Internal transport of bag plants/root trainers to planting points on head loads.							
b	(23 X 28 cm (9" X 11") bag plants) (PCCF TS Hyd Rc.No. 2563/2020/WLR-2, dt: 13.07.2020.	No's	222	164.84	41.21	206.05	100	457
02.09.13	(b) Planting in 45 cm size cubic pit Pit	No's	222	437.48	109.37	546.85	100	1214
02.09.16	Cost of DAP @25gm / planting point	No's	1111	1.00	0.00	1.00	1	1111
02.09.17	Application of fertilizer in August (30 days after planting) by making 3 holes of 10 cm depth with crow bar holes at a distance of 10 cm away from plant and putting fertilizers and closing. Ensure that the soil is really wet at the time of DAP application.	No's	1111	39.27	9.82	49.09	100	545
02.09.18	a) Weeding and saucer formation to a radius of 0.5 mts around the plant immediately after planting (i.e) during June	No's	1111	124.95	31.24	156.19	100	1735
02.09.19	b) Circular weeding cum Deep soil working to a radius of 0.5 m and to a depth of 15 cm (to be done by pick-axe only) without damaging the plant. (during Nov - Dec.)	No's	1111	656.25	164.06	820.31	100	9114


FSR Code	Item of work	Unit	Quantity	As per FSR				Amount (Rs.)
				Rate (Rs.)	Agency allowance 25% (Rs)	Total (Rs.)	Per	
02.09.20	Inter-ploughing (during November) the effective (excluding unsuitable patches) plantation area across the slope to a depth of 30 cm with Heavy-duty Tractor of 55 HP and above with Firm Mould Board (FMB) plough - a) in Ordinary Soils	Ha	1	2321.40	0.00	2321.40	1	2321
02.09.21	Pruning of lower branch initials of Timber and NTFP species by scicature upto 1/3 rd height (to be doen during October)	No's	1111	124.22	31.06	155.28	100	1725
02.09.22	Uprootal of Mahaveera (Hyptis suaveolens) weed with prior written approval of Circle Head and taking photograph before and after uprootal. The weed removal shall be completed before September-end at any cost before inter-ploughing.	Ha	1	3650.90	912.73	4563.63	1	4564
02.09.25	<b>Cost of Protection:</b> (b) For unfenced area: One Casual labour is allowed for plantation more than 10.00 ha but less than 20.00 ha and one more Casual labour is permitted for multiples of 20.00 ha - nine months	per person per month	1	9194.85	0.00	9194.85	Ha	4138
<b>Unit Rate for 2020 -21</b> 10% escalation every year								<b>88407</b>

  
 Forest Divisional Officer  
 Kinnerasnai WLM Division,  
 Palvancha.



**Unit Cost for 1st Year Maintenance of NTSB Plantation (3m X 3 m) SMM per during 2020-21**

Unit Rate per Ha								
FSR Code	Item of work	Unit	Quantity	As per FSR				Amount (Rs.)
				Rate (Rs.)	Agency allowance 25% (Rs)	Total (Rs.)	Per	
02.10.01	Replacement of Casualties 20% during Raising & 25% in 1st year (In case of Eucalyptus 10% during raising and no causality replacement for further maintenance). The casualty replacement should be done in 3 stages at an interval of 15 days immediately after planting during raising year.			50% of rate of original pitting rate during raising year and 100% during maintenance years. Planting, Transportation and internal transportation as prescribed above.				
02.09.06	Digging of Pits in Ploughed Areas in June - July by adopting 50% of original rate of digging of pits of ordinary soil - a) 45 cm size cubic pits	No's	278	10.66	2.66	13.32	1	3703
	Transportation of Bag plants / Root trainer plants from nursery site to plantation site including loading and unloading							
02.09.07	b) upto 5 Km lead (23 X 28 cm (9" X 11") bag plants) (PCCF TS Hyd Rc.No. 2563/2020/WLR-2, dt: 13.07.2020.	No's	278	243.66	60.92	304.58	100	847
02.09.08	b) 5 Km to 25 Km lead (23 X 28 cm (9" X 11") bag plants) (PCCF TS Hyd Rc.No. 2563/2020/WLR-2, dt: 13.07.2020.	No's	278	171.20	42.80	214.00	100	595
02.09.10	Internal transport of bag plants/root trainers to planting points on head loads.							
b	(23 X 28 cm (9" X 11") bag plants) (PCCF TS Hyd Rc.No. 2563/2020/WLR-2, dt: 13.07.2020.	No's	278	164.84	41.21	206.05	100	573
02.09.12	(b) Planting in 45 cm size cubic pit Pit	No's	278	437.48	109.37	546.85	100	1520
02.09.14	Watering (one time) immediately after planting if the planting takes place on a non-rainy days and during dry spell a) One critical watering after planting if planting takes place on non-rainy days with the prior written permission of DFO / FDO.	No's	0	264.86	66.22	331.08	100	0
02.09.16	Cost of DAP @25gm / planting point-50% of raising cost	No's	1111	0.50		0.50	1	556
02.09.17	Application of fertilizer in August (30 days after planting) by making 3 holes of 10 cm depth with crow bar holes at a distance of 10 cm away from plant and putting fertilizers and closing. Ensure that the soil is really wet at the time of DAP application.	No's	1111	39.27	9.82	49.09	100	545
02.10.02	a) Weeding and saucer formation to a radius of 0.5 mts around the plant immediately after planting (i.e) during June	No's	1111	124.95	31.24	156.19	100	1735
02.10.03	Circular weeding cum Deep soil working to a radius of 0.5 m and to a depth of 15 cm (to be done by pick-axe only) without damaging the plant during Nov - Dec	No's	1111	656.25	164.06	820.31	100	9114
02.10.04	Uprootal of Mahaveera (Hyptis suaveolens) weed with prior written approval of Circle Head and taking photograph before and after uprootal. The weed removal shall be completed before September-end at any cost before inter-ploughing.	ha	0.7	3650.90	912.73	4563.63	1	3195
02.10.05	Inter-ploughing (during September) the effective plantation area (excluding unsuitable patches) across the slope to a depth of 30 cm with Heavy-duty Tractor of 55 HP and above with Firm Mould Board (FMB) plough.	ha	1	2321.40	580.35	2901.75	1	2902
02.10.06	Pruning of lower branch initials of Timber and NTFP species by scicature upto 1/3 rd height (to be done during July - Aug)	No's	1111	124.27	31.07	155.33	100	1726
02.10.09	Cost of Protection: (b) For unfenced area: One Casual labour is allowed for plantation more than 10.00 ha but less than 20.00 ha and one more Casual labour is permitted for multiples of 20.00 ha - 12 months	per pers on per month	1	9194.85	0.00	9194.85	Ha	5517
Unit Rate for 2020 - 21								32528
10% escalation every year								

  
 Forest Divisional Officer  
 Kinnerasnai WLM Division,  
 Palvancha.




**Unit Cost for 2nd Year Maintenance of NTSH Plantation (3 m X 3 m) SMM per Ha during 2020-21**

**Unit Rate per Ha**

FSR Code	Item of work	Unit	Quantit y	As per FSR				Amount (Rs.)
				Rate (Rs.)	Agency allowenc e 25% (Rs)	Total (Rs.)	Per	
02.10.01	Replacement of Casualties 20% during Raising & 25% in 1st year (In case of Eucalyptus 10% during raising and no causality replacement for further maintenance). The caualty replacement should be done in 3 stages at an interval of 15 days immediately after planting during raising year. - 5% proposed		50% of rate of original pitting rate during raising year and 100% during maintenance years. Planting, Transportation and internal transportation as prescribed above.					
02.09.06	Digging of Pits in Ploughed Areas in June - July by adopting 50% of original rate of digging of pits of ordinary soil - a) 45 cm size cubic pits	No's	56	10.66	2.66	13.32	1	746
02.09.07	b) upto 5 Km lead (23 X 28 cm (9" X 11") bag plants) (PCCF TS Hyd Rc.No. 2563/2020/WLR-2, dt: 13.07.2020.	No's	56	243.66	60.92	304.58	100	171
02.09.08	b) 5 Km to 25 Km lead (23 X 28 cm (9" X 11") bag plants) (PCCF TS Hyd Rc.No. 2563/2020/WLR-2, dt: 13.07.2020.	No's	56	171.20	42.80	214.00	100	120
02.09.10	Internal transport of bag plants/root trainers to planting points on head loads.	No's	56	164.84	41.21	206.05	100	115
02.09.13	(b) Planting in 45 cm size cubic pit Pit	No's	56	437.48	109.37	546.85	100	306
02.10.05	Inter-ploughing (during September) the effective plantation area (excluding unsuitable patches) across the slope to a depth of 30 cm with Heavy-duty Tractor of 55 HP and above with Firm Mould Board (FMB) plough.	ha	1	2321.40	580.35	2901.75	1	2902
02.11.02	Circular weeding cum Deep soil working to a radius of 0.5 m and to a depth of 15 cm (to be done by pick-axe only) without damaging the plant. (July-Aug)	No's	1111	656.25	164.06	820.31	100	9114
02.11.03	Pruning of lower branch initials of Timber and NTFP species by sciculture upto 1/3 rd height (to be carried out during July-Aug)	No's	1111	124.27	31.07	155.33	100	1726
02.10.04	Uprootal of Mahaveera (Hyptis suaveolens) weed with prior written approval of Circle Head and taking photograph before and after uprootal. The weed removal shall be completed before September-end at any cost before inter-ploughing.	ha	0.6	3650.90	912.73	4563.63	1	2738
02.11.06	Cost of Protection: (b) For unfenced area: One Casual labour is allowed for plantation more than 10.00 ha but less than 20.00 ha and one more Casual labour is permitted for multiples of 20.00 ha - 12 months	per pers on per mon th	1	9194.85	0.00	9194.85	Ha	5517
	Unit Rate for 2020 - 21							23455

10% escalation every year

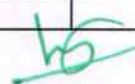
  
 Forest Divisional Officer  
 Kinnerasnai WLM Division,  
 Palvancha.

**Unit Cost for 3rd Year Maintenance of NTSH Plantation (3m X 2m) SMM per Ha during 2020-21**

**Unit Rate per Ha**

FSR Code	Item of work	Unit	Quantity	As per FSR				Amount (Rs.)
				Rate (Rs.)	Agency allowance 25% (Rs)	Total (Rs.)	Per	
02.11.02	Circular weeding cum Deep soil working to a radius of 0.5 m and to a depth of 15 cm (to be done by pick-axe only) without damaging the plant. (July-Aug)	No's	1111	656.25	164.063	820.31	100	9114
02.11.03	Pruning of lower branch initials of Timber and NTFP species by scicature upto 1/3 rd height (to be done during July - Aug)	No's	1111	124.27	31.0669	155.33	100	1726
02.11.06	<b>Cost of Protection:</b> (b) For unfenced area: One Casual labour is allowed for plantation more than 10.00 ha but less than 20.00 ha and one more Casual labour is permitted for multiples of 20.00 ha - six months	per pers on per month	1	9194.85	0.00	9194.85	1	2758
<b>Unit Rate for 2020 - 21</b>								<b>13598</b>

10% escalation every year



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**Unit Cost for 4th Year Maintenance of NTSH Plantation (3m X 3m) SMM per Ha during 2020-21**

Unit Rate per Ha								
FSR Code	Item of work	Unit	Quantity	As per FSR				Amount (Rs.)
				Rate (Rs.)	Agency allowance 25% (Rs)	Total (Rs.)	Per	
02.11.02	Circular weeding cum Deep soil working to a radius of 0.5 m and to a depth of 15 cm (to be done by pick-axe only) without damaging the plant. (July-Aug)	No's	1111	656.25	164.0625	820.31	100	9114
02.11.03	Pruning of lower branch initials of Timber and NTFP species by scicature upto 1/3 rd height (to be done during July - Aug)	No's	1111	124.27	31.06688	155.33	100	1726
02.11.06	<b>Cost of Protection:</b> (b) For unfenced area: One Casual labour is allowed for plantation more than 10.00 ha but less than 20.00 ha and one more Casual labour is permitted for multiples of 20.00 ha - six months	per pers on per mon th	1	9194.85	0.00	9194.85	1	2758
<b>Unit Rate for 2020 - 21</b>								<b>13598</b>

10% escalation every year



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Unit Cost for 5th Year Maintenance of NTSH Plantation (3m X 3m) SMM per Ha during 2020-21

Unit Rate per Ha								
FSR Code	Item of work	Unit	Quantity	As per FSR				Amount (Rs.)
				Rate (Rs.)	Agency allowance 25% (Rs)	Total (Rs.)	Per	
02.11.02	Circular weeding cum Deep soil working to a radius of 0.5 m and to a depth of 15 cm (to be done by pick-axe only) without damaging the plant. (July-Aug)- the work will be carried out between 1 m to 1.1 m in a ring formation- Hence 25% of cost adopted	No's	1111	656.25	164.0625	820.31	100	9114
Unit Rate for 2020 - 21								9114

10% escalation every year

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**Unit Cost for 6th Year Maintenance of NTSH Plantation (3m X 3m) SMM per Ha during 2020-21**

**Unit Rate per Ha**

FSR Code	Item of work	Unit	Quantity	As per FSR				Amount (Rs.)
				Rate (Rs.)	Agency allowen ce 25% (Rs)	Total (Rs.)	Per	
02.11.03	Pruning of lower branch initials of Timber and NTFP species by sciculture upto 1/3 rd height (to be done during July - Aug)	No's	1111	124.27	31.0669	155.33	100	1726
<b>Unit Rate for 2020 - 21</b>								<b>1726</b>

10% escalation every year



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**Unit Cost for 7th Year Maintenance of NTSH Plantation (3m X 3m) SMM per Ha during 2020-21**

**Unit Rate per Ha**

FSR Code	Item of work	Unit	Quantity	As per FSR				Amount (Rs.)
				Rate (Rs.)	Agency allowance 25% (Rs)	Total (Rs.)	Per	
02.11.02	Circular weeding cum Deep soil working to a radius of 0.5 m and to a depth of 15 cm (to be done by pick-axe only) without damaging the plant. (July-Aug)- the work will be carried out between 1 m to 1.1 m in a ring formation- Hence 25% of cost adopted	No's	1111	656.25	164.0625	820.31	100	9114
<b>Unit Rate for 2020 - 21</b>								<b>9114</b>

10% escalation every year



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Unit Cost for 8th Year Maintenance of NTSH Plantation (3m X 3m) SMM per Ha during 2020-21

Unit Rate per Ha

FSR Code	Item of work	Unit	Quantity	As per FSR				Amount (Rs.)
				Rate (Rs.)	Agency allowance 25% (Rs)	Total (Rs.)	Per	
02.11.03	Pruning of lower branch initials of Timber and NTFP species by sciculture upto 1/3 rd height (to be done during July - Aug)	No's	1111	124.27	31.066875	155.33	100	1726
Unit Rate for 2020 - 21								1726

10% escalation every year


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**Unit Cost for 9th Year Maintenance of NTSH Plantation (3m X 3m) SMM per Ha during 2020-21**

**Unit Rate per Ha**

FSR Code	Item of work	Unit	Quantity	As per FSR				Amount (Rs.)
				Rate (Rs.)	Agency allowance 25% (Rs)	Total (Rs.)	Per	
02.11.02	Circular weeding cum Deep soil working to a radius of 0.5 m and to a depth of 15 cm (to be done by pick-axe only) without damaging the plant. (July-Aug)- the work will be carried out between 1 m to 1.1 m in a ring formation- Hence 25% of cost adopted	No's	1111	656.25	164.0625	820.31	100	9114
	<b>Unit Rate for 2020 - 21</b>							<b>9114</b>

10% escalation every year

  
 Forest Divisional Officer  
 Kinnerasnai WLM Division,  
 Palvancha.




**Unit Cost for 10th Year Maintenance of NTSH Plantation (3m X 3m) SMM per Ha during 2020-21**

Unit Rate per Ha

FSR Code	Item of work	Unit	Quantity	As per FSR				Amount (Rs.)
				Rate (Rs.)	Agency allowance 25% (Rs)	Total (Rs.)	Per	
02.11.03	Pruning of flower branch initials of Timber and NTFP species by sciculture upto 1/3 rd height (to be done during July - Aug)	No's	1111	124.27	31.067	155.33	100	1726
Unit Rate for 2020 - 21								1726

10% escalation every year

  
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Kinnerasnai WLM Division,  
Palvancha.